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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,977	06/29/2001	David M. Giuntoli	212/292	9927

7590 06/01/2005

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EXAMINER

BRADFORD, RODERICK D

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,977

Applicant(s)

GIUNTOLI ET AL

Examiner

Roderick Bradford

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-30 is/are pending in the application.
- 4a) Of the above claim(s) 9-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 4-8 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,085,217 in view of Cartmell et al. U. S. Patent No. 6,076,002.

Referring to claims 1 and 30, Shimizu discloses an assembly for use with an electro-acupuncture device having at least two electrodes adapted to provide electrical stimulation to a user's skin when the device is secured to the skin, said electrodes defining an inter-electrode gap provided between the electrodes which separates the electrodes comprising:

- a scrim having a top surface and a bottom surface, said scrim provided with pores extending from the top surface to the bottom surface, wherein said top surface contacts the electrodes when the assembly is releasably applied to the electro-acupuncture device is secured to the skin (Fig. 6)

Art Unit: 3762

- a plurality of masses of hydrogel disposed on the scrim and permeating into the pores of the scrim such that the masses of hydrogel are present on the top surface and the bottom surface of the scrim (Fig. 6)
- wherein the masses of hydrogel are sized and positioned on the scrim such that, for at least one orientation of the scrim relative to the electrodes, any masses positioned within the inter-electrode gap when the assembly is releasably applied to the electro-acupuncture device do not bridge the electrodes (Fig. 6).

Shimizu fails to disclose wherein the masses of hydrogel are elongated strips having widths less than the inter-electrode gap even when deformed under contact with the electrodes and the skin. However, Cartmell discloses wherein the masses of hydrogel are elongated strips having widths less than the inter-electrode gap even when deformed under contact with the electrodes and the skin (Fig. 2) as means to prevent the electrodes from shorting out.

It would have been obvious to one having ordinary skill in the art to modify the teachings of Shimizu to include wherein the masses of hydrogel are elongated strips having widths less than the inter-electrode gap even when deformed under contact with the electrodes and the skin, such as taught by Cartmell, as means to prevent the electrodes from shorting out.

Referring to claim 7, Shimizu discloses when the assembly is releasably applied

Art Unit: 3762

to the device and the device is secured to the skin, the masses of hydrogel are capable of providing electrical conduction from the electrodes, through the masses of hydrogel, and the skin (column 5, lines 1-21).

Referring to claims 4 and 5, Shimizu fails to disclose wherein the masses of hydrogel are disposed on the top/bottom surface of the scrim, and said hydrogel permeates into the pores and being present at the bottom/top surface. However, Cartmell discloses wherein the masses of hydrogel are disposed on the top/bottom surface of the scrim, and said hydrogel permeates into the pores and being present at the bottom/top surface (column 7, lines 26-56) as a means of enhancing the conductivity.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Shimizu to include wherein the masses of hydrogel are disposed on the top/bottom surface of the scrim, and said hydrogel permeates into the pores and being present at the bottom/top surface, as taught by Cartmell, as a means of enhancing the conductivity.

8. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. U.S. Patent No. 5,085,217 in view of Cartmell et al. U. S. Patent No. 6,076,002.

Referring to claim 6, Shimizu in view of Cartmell discloses the claimed invention except for wherein the masses of hydrogel are disposed on the top surface and bottom surface of the scrim, wherein for each mass of hydrogel disposed on the top surface there is a corresponding mass of hydrogel disposed on the opposite bottom surface. It

Art Unit: 3762

would have been an obvious matter of design choice to one skilled in the art to modify the teaching and device of Shimizu in view of Cartmell to include masses of hydrogel that are disposed on the top surface and bottom surface of the scrim, wherein for each mass of hydrogel disposed on the top surface there is a corresponding mass of hydrogel disposed on the opposite bottom surface, since the applicant has not disclosed that having masses of hydrogel disposed on the top surface and bottom surface of the scrim, wherein for each mass of hydrogel disposed on the top surface there is a corresponding mass of hydrogel disposed on the opposite bottom surface provides any criticality and/or unexpected results and it appears that the invention would perform equally well with hydrogel masses such as the hydrogel masses as taught by Shimizu in view of Cartmell as a means of enhancing the conductivity.

Referring to claim 8, Shimizu in view of Cartmell discloses the claimed invention except for the masses of hydrogel being capable of providing an impedance matching layer between the electrodes and the skin. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device as taught by Shimizu, with masses of hydrogel that are capable of providing an impedance matching layer between the electrodes and the skin since it was well known in the art to use masses of hydrogel that are capable of providing impedance matching layer between electrodes and the skin as means of improving the conductivity between the skin and the electrode.


Art Unit: 3762

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (571) 272-4942. The examiner can normally be reached on Monday - Friday 9 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


R.B.



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